

REMARKS

Claims 1-26 are pending in the application. Claims 1, 6, 11, and 14 are independent. By the foregoing Amendment, claims 2, 6-10, and 20-21 have been amended, and claims 22-26 have been added. These changes are believed to introduce no new matter and their entry is respectfully requested.

Objection to the Specification – No Summary

In the Office Action, the Examiner objected to the Specification. Specifically, the Examiner stated that a Summary of the Invention has not been included with the Specification. Applicants respectfully traverse the objection. Applicant would like to kindly point out that both the M.P.E.P. and 37 C.F.R. §1.73 do not require the presence of a “Summary of the Invention” in a patent application. They merely indicate where in the application the “Summary of the Invention” should be placed if Applicant were to elect to include one. In particular, 37 C.F.R. §1.73 only states that “[a] brief summary of the invention ... should precede the detailed description.” 37 CFR § 1.73 does not state “must” or “shall.” Accordingly, Applicant has elected not to include a “Summary of the Invention” as this is within the discretion of Applicant.

Objection to Claims 2 and 9

In the Office Action, the Examiner objected to claims 2 and 9 citing informalities. By the foregoing Amendment, Applicant has amended claims 2 and 9 to accommodate the Examiner. Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the objection to claims 2 and 9.

Rejection of Claims 6-10 Under 35 U.S.C. §101

In the Office Action, the Examiner rejected claims 6-10 under 35 U.S.C. §101 as being directed to non-statutory subject matter. In particular, the Examiner states that claims 13-18 are not limited to tangible embodiments because, in view of the Specification at page 12, lines 4-6, the medium is not limited to tangible embodiments, instead being defined as including intangible embodiments (e.g., computer data signal embodied in a carrier wave). By the foregoing Amendment, Applicant has amended claims 6-10 to accommodate the Examiner. Accordingly,

Applicant respectfully requests that the Examiner reconsider and remove the objection to claims 6-10.

Rejection of Claims 2, 7, and 14-21 Under 35 U.S.C. § 112, Second Paragraph

In the Office Action, the Examiner rejected claims 2, 7, and 14-21 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the applicant regards as the invention. Specifically, the Examiner states that the term “sequential” is open to multiple interpretations. Applicant respectfully traverses the rejection.

35 U.S.C. §112, second paragraph, requires that claims (1) set forth the subject matter the applicant seeks to protect and (2) define the metes and bounds of the subject matter the applicant seeks to protect. (MPEP §2171.) These are two separate requirements. (MPEP §2171.) That is, if a rejection is based on 35 U.S.C. §112, second paragraph, an Examiner should explain whether the rejection is based on indefiniteness (*i.e.*, the metes and bounds of the invention are not defined) *or* on the failure to particularly point out and distinctly claim the subject matter that the applicant regards as the invention (*i.e.*, it is not clear what the invention is). (MPEP §2171.)

In the Office Action, it appears to Applicant that the Examiner is asserting that claims 2, 7, and 14 fail to meet the latter requirement, *i.e.*, fail to set forth the subject matter the Applicants regard as their invention. In this rejection, it appears to Applicants that the Examiner is asserting that claims 2, 7, and 14 fail to meet the definiteness requirement (*i.e.*, the metes and bounds of the invention are not defined). Applicant respectfully disagrees.

MPEP §2171.02 provides that the test for definiteness under 35 U.S.C. §112, second paragraph, is whether “those skilled in the art would understand what is claimed when the claim is read in light of the specification” (*citing Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir.1986)). Applicant respectfully submits that the term “sequential” claims 2, 7, and 14 read in light of the specification is clear. For example, in paragraph [0034] of Applicant’s Specification describes “In one embodiment of the present invention, the bank in the memory device 114 designated to receive the next command is the next sequential bank. That is,

if bank 0 was the last bank to receive a command, then the finite state machine 302 determines that bank 1 is designated to receive the next command.” Accordingly, Applicant respectfully requests the Examiner reconsider and remove the rejection to claims 2, 7, and 14-19.

By the foregoing Amendment, Applicant has amended claims 20 and 21 to accommodate the Examiner. Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the objection to claims 20 and 21.

Rejection of Claims 1-3, 6-8, 14-15, and 18 Under 35 U.S.C. §102(b)

In the Office Action, the Examiner rejected claims 1-3, 6-8, 14-15, and 18 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,470,433 to Prouty et al. (hereinafter “*Prouty*”). Applicants respectfully traverse the rejection.

A claim is anticipated only if each and every element of the claim is found, either expressly or inherently, in a reference. (MPEP §2131 *citing Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987)). The identical invention must be shown in as complete detail as is contained in the claim. *Id. citing Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989)). Applicant respectfully submits that *Prouty* fails to show the identical invention in as complete detail as contained in the claims.

In the Office Action, the Examiner states that *Prouty* teaches an integrated circuit having N queues (read queues 508 and 512 and write queues 510 and 514) to receive commands for a memory device. The Examiner states that the memory device has M banks and the queues 508 and 510 can map to any of the four banks. The Examiner asserts further that *Prouty* teaches logic to determine a last type of command de-queued, determine a bank designated to receive a next command to be de-queued, inspect the first and the second queues for a type of command matching the last type of command de-queued, de-queue the command that matches the last type of command de-queued, and send the de-queued command to the designated bank. Applicant respectfully disagrees.

In asserting that *Prouty* teaches logic to inspect the first and the second queues for a type of command matching the last type of command de-queued it can be seen that in order to limit the transitions from read to write and from write to read it is necessary that there must be logic to inspect the first and the second queues for a type of command matching the last type of command de-queued. It appears that the Examiner is arguing that logic to inspect the first and the second queues for a type of command matching the last type of command de-queued is inherently taught in *Prouty* and the Examiner points to no express teaching for this element of claims 1, 6, and 14.

To establish inherency, an Examiner must provide rationale or evidence tending to show inherency. MPEP §2112 IV. If relying on extrinsic evidence, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. (MPEP §2112IV *citing In re Oelrich*, 666 F.2d 578, 581-582 (CCPA 1981)). If relying on rationale, an Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the prior art (emphasis in original). (MPEP §2112IV *citing Ex parte Levy*, 17 USPQ.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)).

It appears that the Examiner is relying on “rationale” to show logic to inspect the first and the second queues for a type of command matching the last type of command de-queued is inherently taught in *Prouty* when asserting that in order to limit the transitions from read to write and from write to read the logic must be present in *Prouty*. Applicant respectfully submits that this rationale is faulty. In *Prouty*, there is no reason to inspect the read queues 508 and 512 or write queues 510 and 514 for a type of command matching the last type of command de-queued because the controller in *Prouty* knows that there are only read commands in the read queues 508 and 512 and only write commands in the write queues 510 and 514. Thus it does not necessarily flow that *Prouty* teaches logic to inspect the first and the second queues for a type of command matching the last type of command de-queued as asserted by the Examiner.

Applicant respectfully submits that Applicant only needs to demonstrate that one element of the claimed invention is missing to establish that the Examiner has not met the initial burden

of making a *prima facie* case of anticipation with respect to the claimed invention. Applicants have shown that at least one element is not taught either expressly or inherently in *Prouty*. Applicants respectfully submit therefore that because the Examiner has failed to show that *Prouty* teaches the identical invention as recited in claims 1, 6, and 14 the Examiner has failed to meet the burden of establishing a *prima facie* case of anticipation of the claimed invention over the *Prouty*. Accordingly, Applicants respectfully request the reconsider and remove the rejection.

Claims 2-3 properly depend from claim 1, which Applicant respectfully submits is patentable. Claims 7-8 properly depends from claim 6, which Applicant respectfully submits is patentable. Claims 15-18 properly depend from claim 14, which Applicant respectfully submits is patentable. Accordingly, Applicant respectfully submits that claims 2-3, 7-8, and 15-18 are patentable for at least the same reasons that claims 1, 6, and 14, respectively, are patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988))). Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claims 1-3, 6-8, 14-15, and 18.

Rejection of Claims 11-12 Under 35 U.S.C. §103(a)

In the Office Action, the Examiner rejected claims 11-12 under 35 U.S.C. §103(a) as being obvious over *Prouty* in view of U.S. Patent No. 6,839,266 to Garrett, Jr. et al. (hereinafter “*Garrett*”). Applicant respectfully traverses the rejection.

To establish a *prima facie* case of obviousness, an Examiner must show that that there is some suggestion or motivation to modify a reference to arrive at the claimed invention, that there is some expectation of success, and that the cited reference teaches each and every element of the claimed invention. (MPEP §2143.) citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Applicant respectfully submits that *Prouty* in view of *Garrett* fails to teach or fairly suggest each and every element of the claimed invention.

In the Office Action, the Examiner applies the rejection of claim 1 to claim 11 with regard to lines 1-11 of claim 11. That is, the Examiner again is arguing that *Prouty* teaches an integrated circuit having N queues (read queues 508 and 512 and write queues 510 and 514) to

receive commands for a memory device. The Examiner states that the memory device has M banks and the queues 508 and 510 can map to any of the four banks. The Examiner asserts further that *Prouty* teaches logic to determine a last type of command de-queued, determine a bank designated to receive a next command to be de-queued, inspect the first and the second queues for a type of command matching the last type of command de-queued, de-queue the command that matches the last type of command de-queued, and send the de-queued command to the designated bank. Applicant again respectfully disagrees.

In asserting that *Prouty* teaches logic to inspect the first and the second queues for a type of command matching the last type of command de-queued it can be seen that in order to limit the transitions from read to write and from write to read it is necessary that there must be logic to inspect the first and the second queues for a type of command matching the last type of command de-queued. It appears that the Examiner is arguing that logic to inspect the first and the second queues for a type of command matching the last type of command de-queued is inherently taught in *Prouty* and the Examiner points to no express teaching for this element of claims 1, 6, and 14.

As discussed above, it appears that the Examiner is relying on “rationale” to show logic to inspect the first and the second queues for a type of command matching the last type of command de-queued is inherently taught in *Prouty* when asserting that in order to limit the transitions from read to write and from write to read the logic must be present in *Prouty*. Applicant respectfully submits that this rationale is faulty. In *Prouty*, there is no reason to inspect the read queues 508 and 512 or write queues 510 and 514 for a type of command matching the last type of command de-queued because the controller in *Prouty* knows that there are only read commands in the read queues 508 and 512 and only write commands in the write queues 510 and 514. Thus it does not necessarily flow that *Prouty* teaches logic to inspect the first and the second queues for a type of command matching the last type of command de-queued as asserted by the Examiner.

Applicant respectfully submits that Applicant only needs to demonstrate that one element of the claimed invention is missing to establish that the Examiner has not met the initial burden of making a *prima facie* case of anticipation with respect to the claimed invention. Applicants

have shown that at least one element is not taught either expressly or inherently in *Prouty*. Applicants respectfully submit therefore that because the Examiner has failed to show that *Prouty* teaches the identical invention as recited in claim 11 the Examiner has failed to meet the burden of establishing a *prima facie* case of anticipation of the claimed invention over the *Prouty*. Accordingly, Applicants respectfully request the reconsider and remove the rejection.

Claim 12 properly depend from claim 11, which Applicant respectfully submits is patentable. Accordingly, Applicant respectfully submits that claim 12 is patentable for at least the same reasons that claim 11 is patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)). Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claims 11-12.

Rejection of Claims 20-21 Under 35 U.S.C. §103(a)

In the Office Action, the Examiner rejected claims 20-21 under 35 U.S.C. §103(a) as being obvious over *Prouty* in view of U.S. Patent Publication No. 2004/0193777 to LaBerge (hereinafter “*LaBerge*”) in further view of U.S. Patent No. 6,530,001 to Lee (hereinafter “*Lee*”). Applicant respectfully traverses the rejection.

Claims 20-21 properly depend from claim 14, which Applicant respectfully submits is patentable. Accordingly, Applicant respectfully submits that claims 20-21 are patentable for at least the same reasons that claim 14 is patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)). Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claims 20-21.

CONCLUSION

Applicant submits that all grounds for rejection have been properly traversed, accommodated, or rendered moot and that the application is now in condition for allowance. The Examiner is invited to telephone the undersigned representative if the Examiner believes that an interview might be useful for any reason.

Respectfully submitted,

BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP

Date: 12/29/2006

Jan Little-Washington
Jan Little-Washington
Reg. No. 41,181
(206) 292-8600

FIRST CLASS CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

on December 29, 2006
Date of Deposit

Yuko Tanaka

Name of Person Mailing Correspondence

Y. Tanaka
Signature

December 29, 2006
Date